

DEPARTMENT OF PERMITTING, ENVIRONMENT, AND REGULATORY AFFAIRS (PERA)
BOARD AND CODE ADMINISTRATION DIVISION

BOARD AND CODE ADMINISTRATION DIVISION

# NOTICE OF ACCEPTANCE (NOA)

MIAMI-DADE COUNTY PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/pera/

NUDURA Corporation 27 Hooper Road, Unit 10 Barrie, Ontario, Canada L4N 9S3

#### SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA-Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

### **DESCRIPTION: Insulated Concrete Form Wall System**

APPROVAL DOCUMENT: Drawing No. MD-NUD 0911, titled "Nudura Integrated Building Technology Insulated Concrete Forming System", Sheet 1 of 1, prepared by Nudura Integrated Building Technology, dated 06/21/2011, with revision "11092101" dated 12/20/2011, signed and sealed by Hermes F. Norero, P. E., bearing the Miami-Dade County Product Control renewal stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

#### MISSILE IMPACT RATING: None

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, Columbus, GA and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA renews NOA # 05-0330.02 and consists of this page 1, evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.

MIAMIDADE COUNTY
APPROYED

105/03/2012

NOA No 11-0720.02 Expiration Date: July 20, 2016 Approval Date: May 10, 2010

Page 1

## **NOTICE OF ACCEPTANCE: EVIDENCE PAGE**

#### A. DRAWING

Drawing No. **MD-NUD 0911**, titled "Nudura Integrated Building Technology Insulated Concrete Forming System", Sheet 1 of 1, prepared by Nudura Integrated Building Technology, dated 06/21/2011, with revision "11092101" dated 12/20/2011, signed and sealed by Hermes F. Norero, P.E.

Date

Signature

R	TEST	"Submitted	under NOA	# 05-0330.02"
17.		DRUILLILL	MINNEY ATOXA	

Teef

Laboratory Report

Laboratory Report	1 651	Date	Signature
BASF and NOVA EPS: 1. SGS 110170	ASTM C 1338	06/29/04	Dale E. Holloway
BASF EPS:			·
1. RAD-3561	ASTM C 578(ASTM C303)	01/10/05	Michael L. Zieman, P.E.
2. RAD-3561	ASTM C 578(ASTM D1621)	01/10/05	Michael L. Zieman, P.E.
<b>3.</b> RAD-3561	ASTM C 578(ASTM C203)	01/10/05	Michael L. Zieman, P.E.
<b>4.</b> RAD-3561	ASTM C 578(ASTM D2863)	01/10/05	Michael L. Zieman, P.E.
<b>5.</b> RAD-3561	ASTM C 578(ASTM C518)	01/10/05	Michael L. Zieman, P.E.
<b>6.</b> RAD-3561	ASTM C 578(ASTM E96)	01/10/05	Michael L. Zieman, P.E.
7. RAD-3561	ASTM C 578(ASTM C272)	01/10/05	Michael L. Zieman, P.E.
<b>8.</b> RAD-3561	ASTM C 578(ASTM D2126)	01/10/05	Michael L. Zieman, P.E.
9. UL-01NK44301 (Flan	ne Spread & Smoke Developed)	02/14/02	R.F. Oleck, P.E.
10. SGSUS 092897	ASTM D1929	11/28/88	R.F. Oleck, P.E.

# "Submitted under NOA # 02-0919.09"

NOVA Chemicals E	<u>PS</u> :		
1. RAD-2884	ASTM C 578ASTM C303	09/01/01	J. Donald Waldman
2. RAD-2884	ASTM C 578ASTM C518	09/01/01	J. Donald Waldman
3. RAD-2884	ASTM C 578 ASTM D1621	09/01/01	J. Donald Waldman
<b>4.</b> RAD-2884	ASTM C 578-00 (ASTM C20	3) 09/01/01	J. Donald Waldman
<b>5.</b> RAD-2884	ASTM C 578-00 (ASTM E96	) 09/01/01	J. Donald Waldman.
<b>6.</b> RAD-2884	ASTM C 578-00 (ASTM C27	2) 09/01/01	J. Donald Waldman
7. RAD-2884	ASTM C 578-00 (ASTM D28	63) 09/01/01	J. Donald Waldman
8. RAD-2884	ASTM C 578-00 (ASTM D21	26) 09/01/01	J. Donald Waldman
<b>9.</b> UL-016844006	(Flame Spread & Smoke Develop	ed) 02/14/01	R.F. Oleck, P.E.
<b>10.</b> SGSUS 092897	ASTM D1929	11/28/88	R.F. Oleck, P.E.

#### NUDURA Reinforcing Web:

115 1100		
ASTM D638	03/26/02	Cameron Robison, P.E.
ASTM D1929	03/26/02	Cameron Robison, P.E.
ASTM D635	03/26/02	Cameron Robison, P.E.
ASTM D2843	03/26/02	Cameron Robison, P.E.
	ASTM D638 ASTM D1929 ASTM D635	ASTM D638 03/26/02 ASTM D1929 03/26/02 ASTM D635 03/26/02

Carlos M. Utrera, P.E. Product Control Examiner

NOA No 11-0720.02 Expiration Date: July 20, 2016 Approval Date: May 10, 2012

#### **NUDURA Corporation**

# **NOTICE OF ACCEPTANCE: EVIDENCE PAGE**

#### C. CALCULATION

1. None.

#### D. QUALITY ASSURANCE

1. Miami-Dade Department of Permitting, Environment, and Regulatory Affairs (PERA)

#### E. MATERIAL CERTIFICATIONS

1. None.

#### F. STATEMENTS

- 1. Statement letter of code conformance to 2010 FBC and no financial interest, issued by Building Drops, Inc., dated 04/30/2012, signed and sealed by Hermes F. Norero, P.E.
- 2. Statement letter of code conformance to 2007 FBC and no financial interest, issued by CertWorks, dated 06/21/2011, signed and sealed by Alexis Spyrou, P.E.
- 3. Distributor agreement dated 01/05/2012.

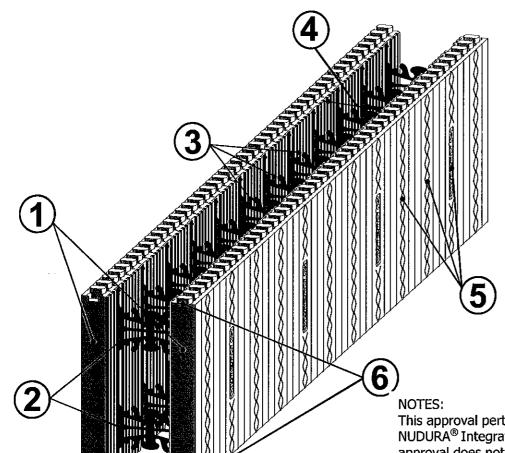
#### "Submitted under NOA # 05-0330.02"

- 4. Letter of Code Compliance, issued by Robert F. Oleck, P.E., dated 02/10/2005 and signed and sealed by Robert F. Oleck, P.E.
- 5. Letter of No Financial Interest, issued by Robert F. Oleck, P.E., dated 02/10/2005 and signed by Robert F. Oleck, P.E.

Carlos M. Utrera, P.E. Product Control Examiner

NOA No 11-0720.02 Expiration Date: July 20, 2016

Approval Date: May 10, 2012



# Form Component Legend

- 1. Expanded Polystyrene Foam Panels
- 2. Patented Hinged Folding Polypropylene Webs
- 3. Reinforcing Steel Capture Lugs
- 4. Concrete Core
- 5. Fastening Strip Identifying Marks
- Reversible Top and Bottom Panel Interlocks

This approval pertains to the insulation properties of NUDURA® Integrated Building Technology only. This approval does not imply approval of the concrete used within the form system or the structural and/or forming capacity of the material and the system. IMPORTANT: PROTECT PRODUCT FROM UV EXPOSURE BY ENSURING ANY EXTERIOR EXPOSED SURFACE IS EITHER FINAL FINISHED OR CLADDED WITH TEMPORARY UV PROTECTION WITHIN 12 MONTHS OF INSTALLATION.

# NUDURA® Integrated Building Technology Insulated Concrete Form Wall System

## DESCRIPTION

"NUDURA® Integrated Building Technology" is an insulated concrete form system which features 2 parallel wall panels formed of Type II expanded polystyrene foam (as manufactured by BASF Corporation or NOVA Chemical Corporation) cross linked at 8 inches o/c with foldable high density polypropylene webs with fastening strips embedded in the foam. Each panel measures 8 feet in length, 18 inches in height by 2 5/8" in thickness. Once unfolded and set into position, the units formed by the panels can be stacked together to form nominal wall cavity thicknesses of 4", 6", 8", 10" and 12". The cavity can then be reinforced with steel reinforcing bars and filled with concrete to form a structural monolithic reinforced concrete wall. After the concrete has hardened, the forms remain in place as integral part of the wall to serve as insulation on both the inside and outside of the concrete wall and the embedded fastening strips provide strapping for fastening finishing materials to both inside and outside of the insulation. The system as a concrete forming system shall comply with ACI 347, and the concrete walls shall comply with ACI 318. The properties of the EPS are listed below: (IMPORTANT: SEE INSET NOTES BELOW LEFT)

Product Characteristics - All EPS Resins & Polypropylene Webs				
Material Property	Standard	Limit	Result	Status
ALL APPROVED EPS RESIN		Max./Min.		
Thermal Transmission	ASTM C518	Min. R4.00/in	Min. R4.16/in	Complies
Flame Spread Rating	ASTM E84	Index <10	5	Complies
Smoke Developed Index	ASTM E84	Index < 450	190	Complies
Water Vapor Permeance	ASTM E96	Max. 3.5 Perms	2.6 Perms	Complies
Water Absorption	ASTM C272	Max. 3%	2.26%	Complies
Density	ASTM C303	1.35 pcf	1.35 pcf	Complies
Compressive Properties	ASTM D1621	Min. 15.0 psi	20.64 psi	Complies
Flexural Strength	ASTM C203	Min. 35.0 psi	42.7 psi	Complies
Limiting Oxygen Index	ASTM D2863	Min. 24%	>24% Passed	Complies
Thermal & Humid Aging	ASTM D2126	2.0 % Max. Variance	0.27% Max	Complies
Fungi Resistance	ASTM C1338	No Growth	No Growth	Complies
Self Ignition Temperature	ASTM D1929	Min. 650°F	<b>896</b> °F	Complies
POLYPROPYLENE WEBS				
Self Ignition Temperature	ASTM D1929	Min. 650°F	734°F	Complies
Smoke Density Rating	ASTM D2843	Max. 75%	25.5%	Complies
Rate of Burning	ASTM D635	Max. 1 1/2"	3/8″	Complies

#### FOR OFFICE USE ONLY:

PRODUCT RENEWED as complying with the Florida Building Code
Acceptance No 11-0720,02
Expiration Pate 07 120 120 16

#### VALIDATION STAMP: REGISTERED FLORIDA ENGINEER



REGISTERED FLORIDA ENGINEER OR VALIDATION AGENCY ON BEHALF OF NUDURA CORP:

Hermes F. Norero, P.E.
Florida PE No. 73778
Building Drops
127 W. Fairbanks Ave., Suite 438
Winter Park, FL 32789
FBPE Cert. of Authorization
No. 29578

TEL: 407.644.6957 FAX: 407.644.2366

EMAIL: contact@buildingdrops.com

#### **MANUFACTURER:**



Building Value.

NUDURA Corporation 27 Hooper Road, Unit 10 Barrie, Ontario, Canada L4N 9S3

Phone: (866) 468-6299 Fax: (705) 726-2110 Email: info@nudura.com Title:

# NUDURA® Integrated Building Technology Insulated Concrete Forming System

Drawing No.

Revision No. **11092101** 

APPROVAL DOCUMENT

**DEC 20/2011** 

**Revision Date:** 

Drawn By:

Date: (Original Dwg.)

Sheet No.

**MD-NUD 0911** 

KR/KS

JUN 21/2011

1 of 1